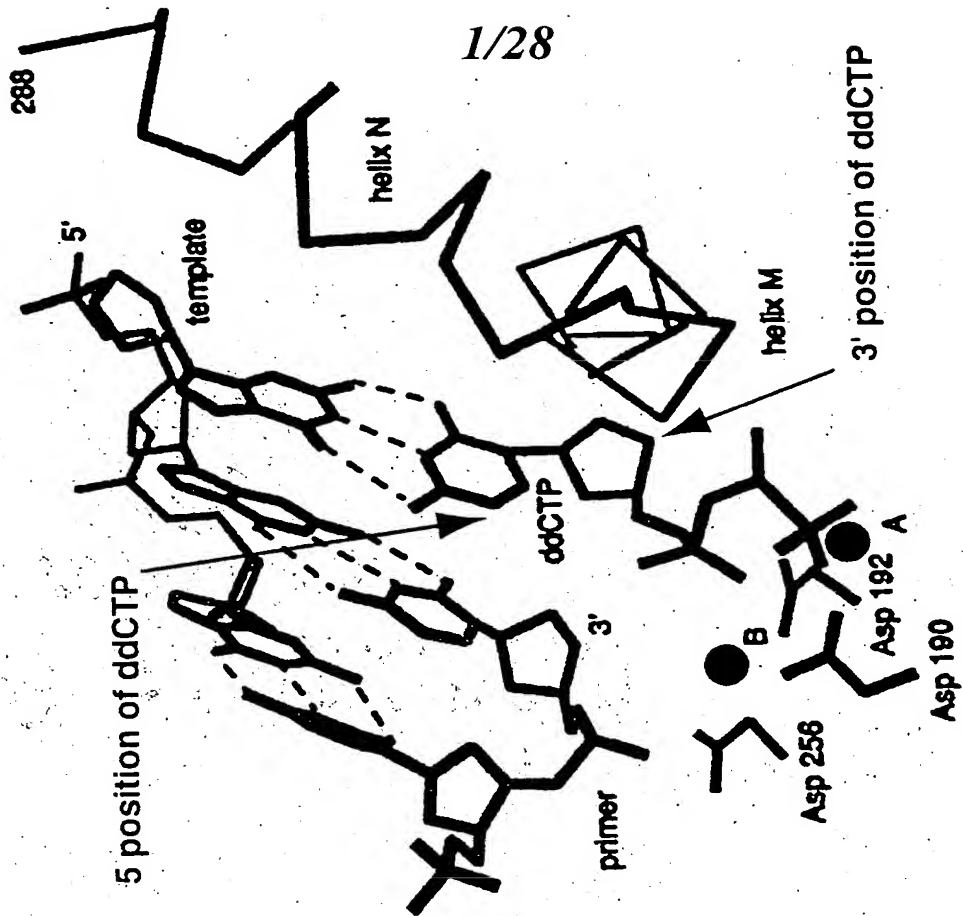
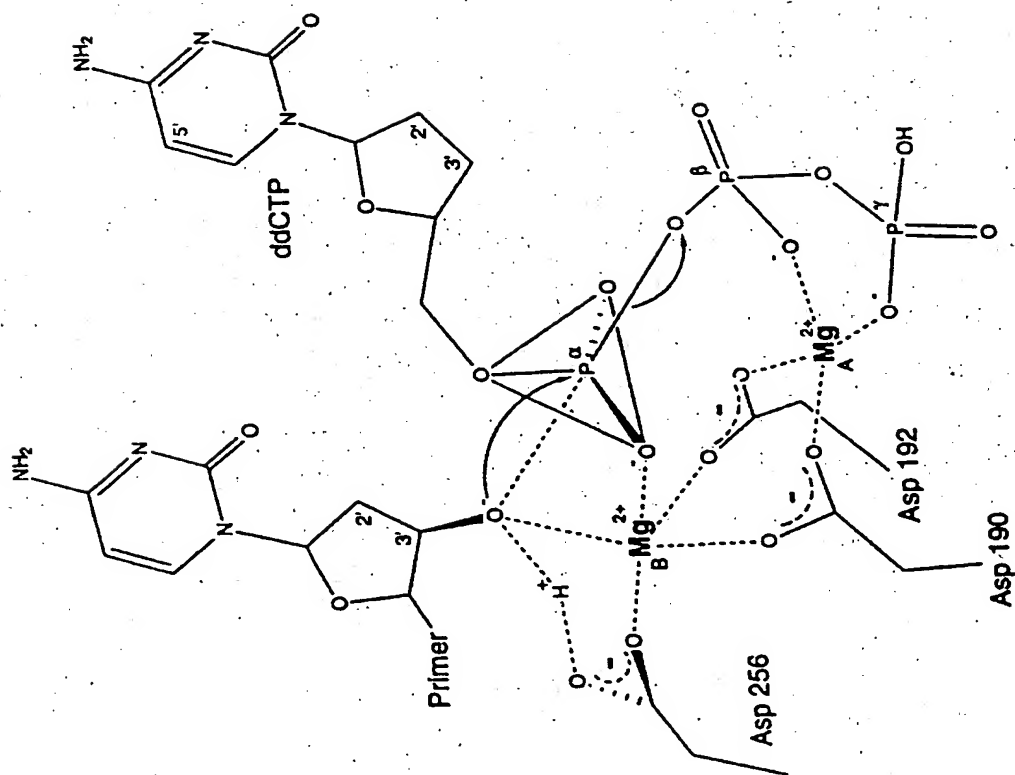


**FIGURE 1**



Asp = Aspartic Acid

FIGURE 2A

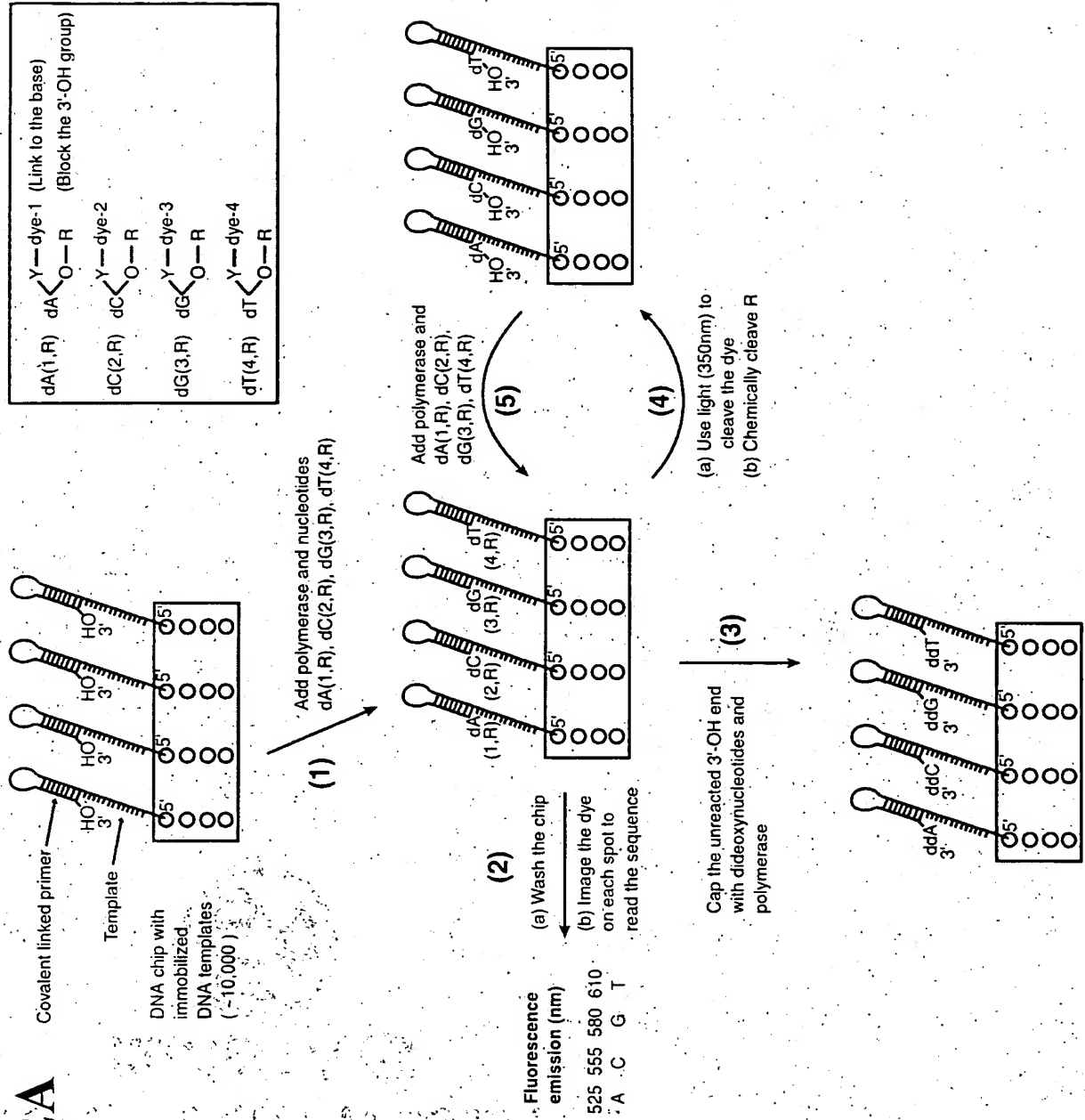


FIGURE 2B

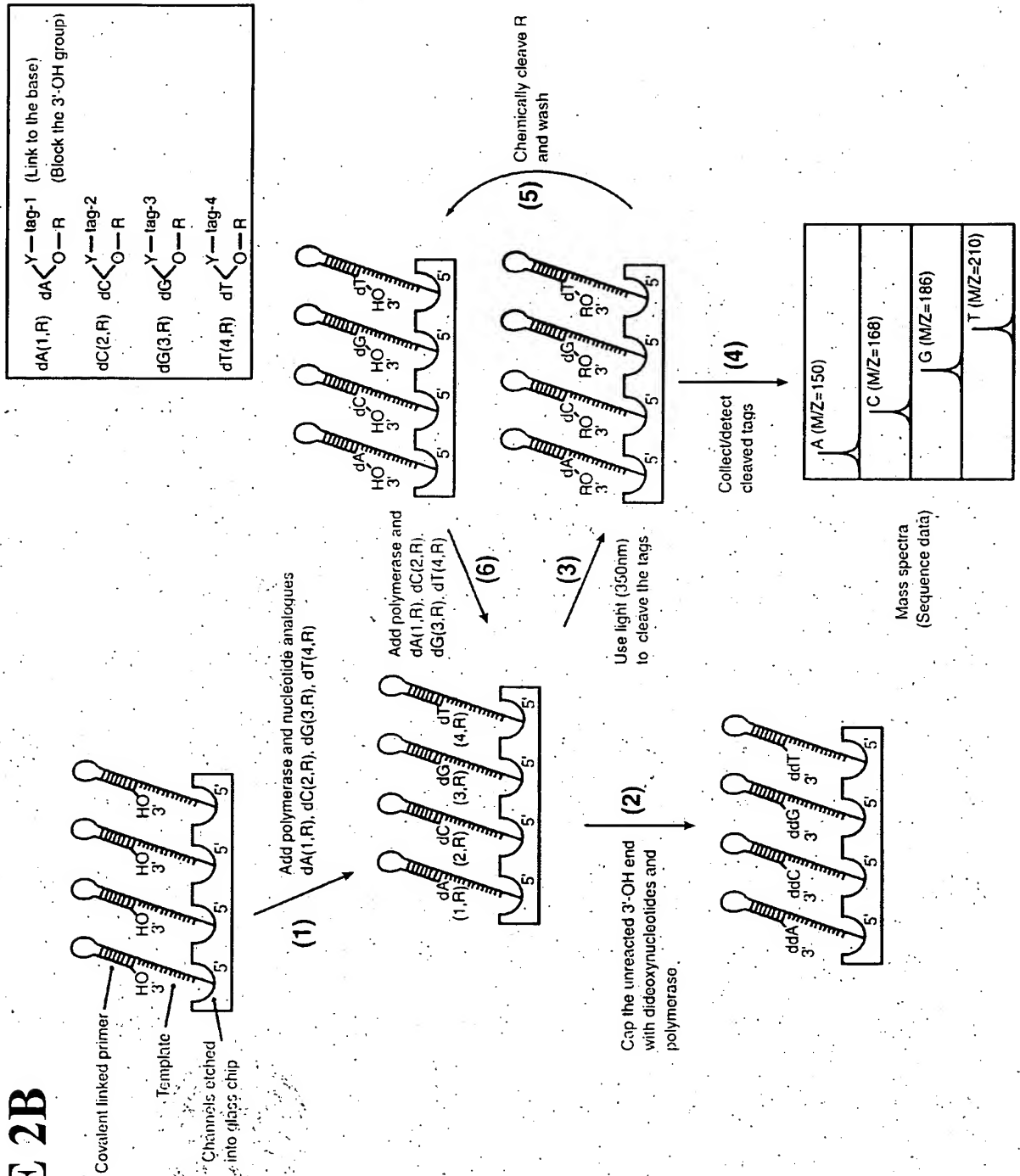


FIGURE 3

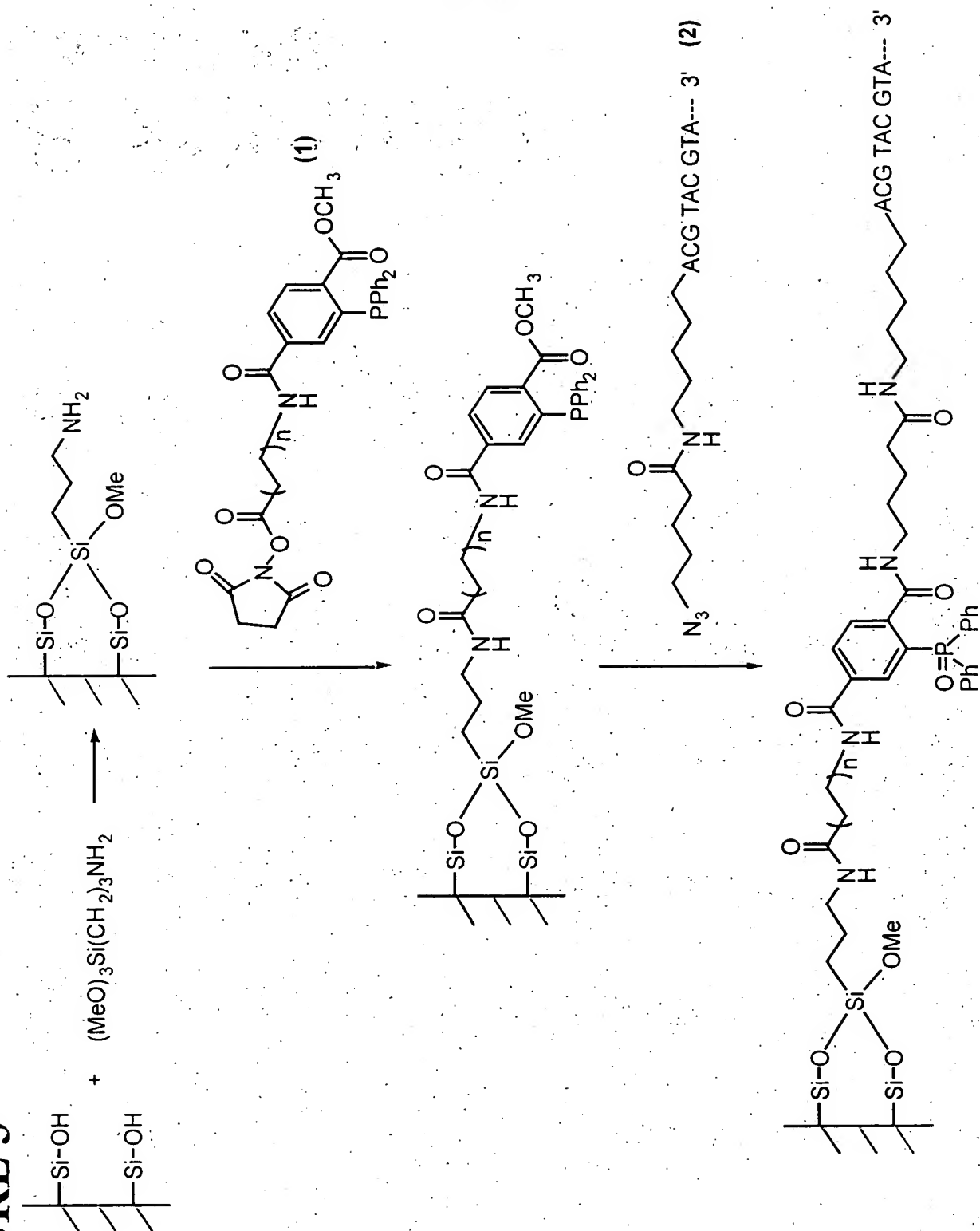




FIGURE 5

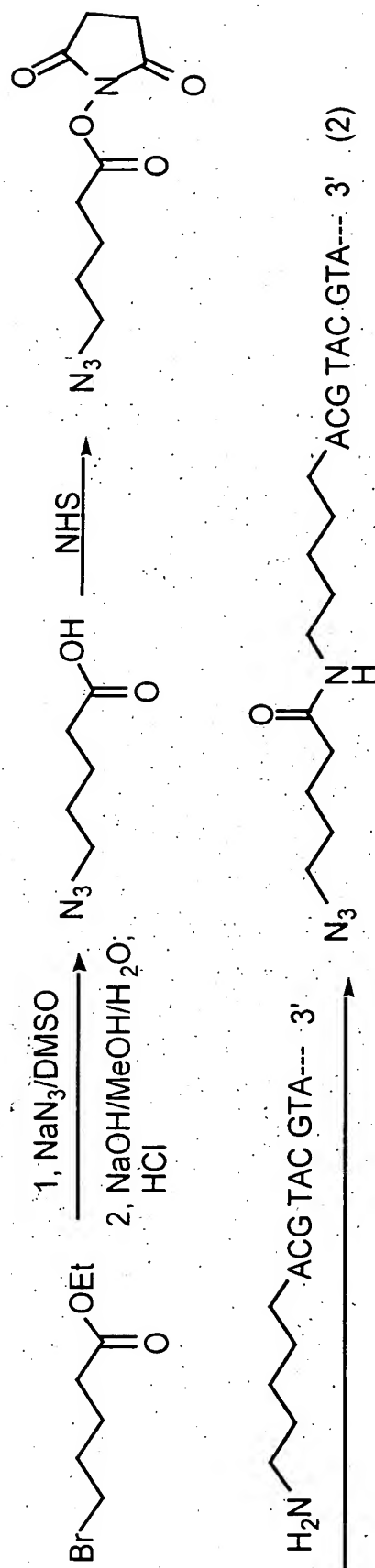
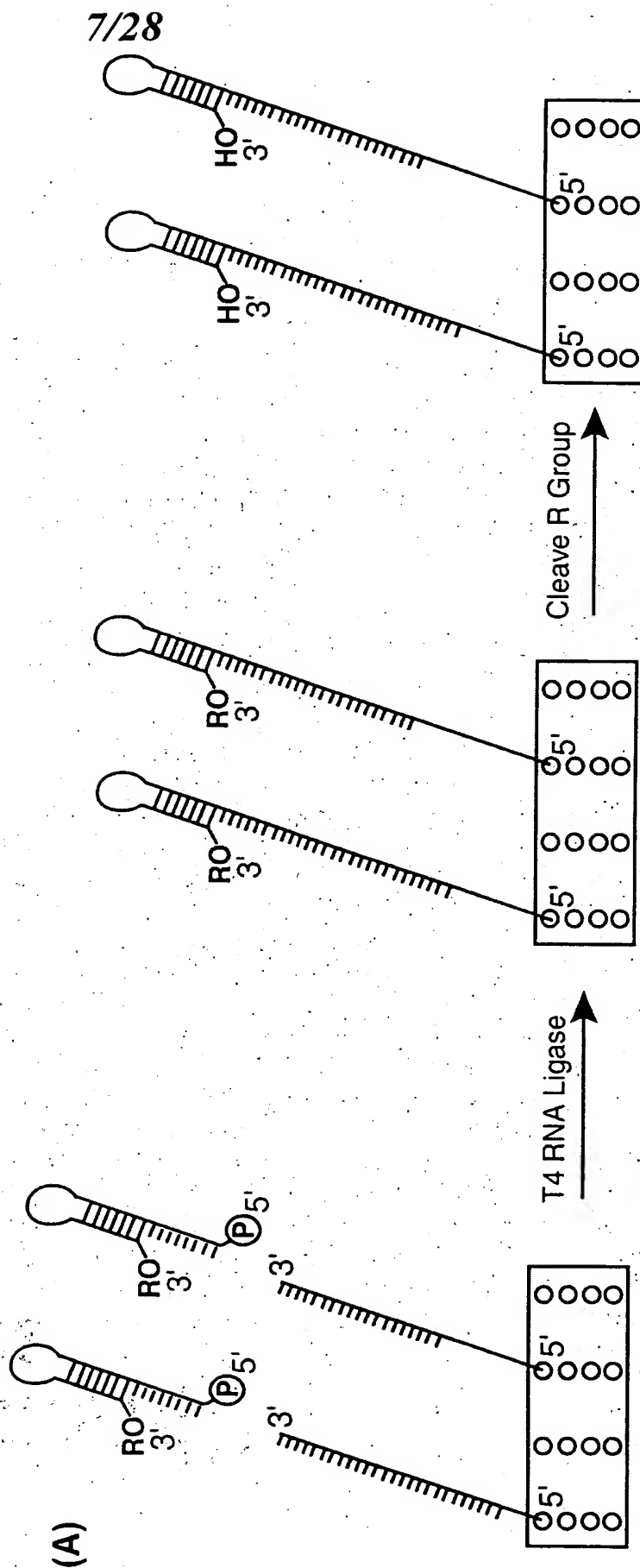


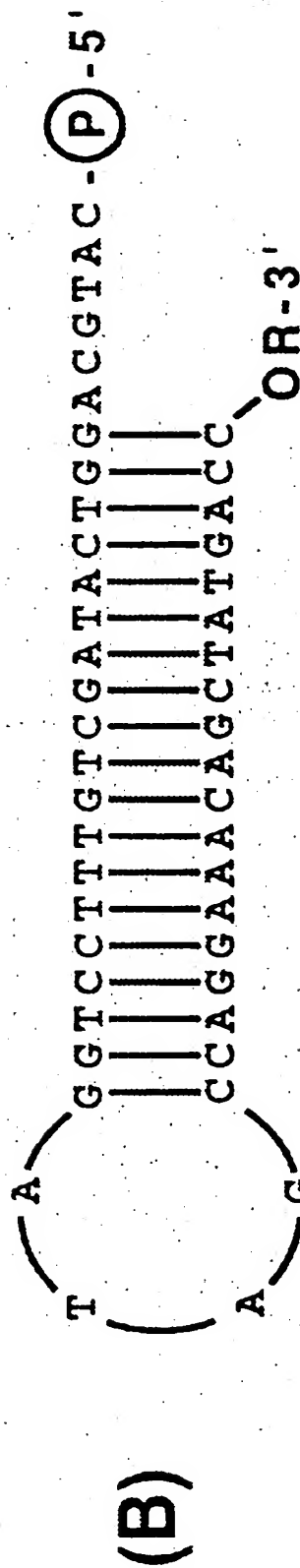
FIGURE 6A



Cleave R Group

T4 RNA Ligase

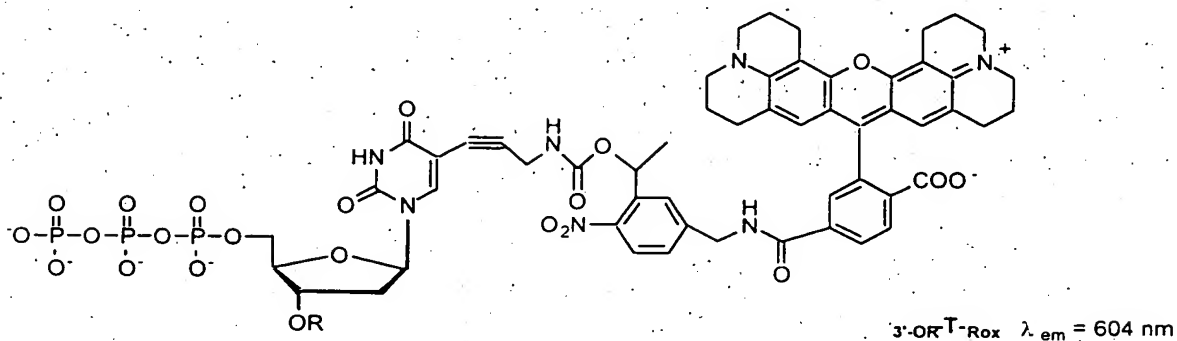
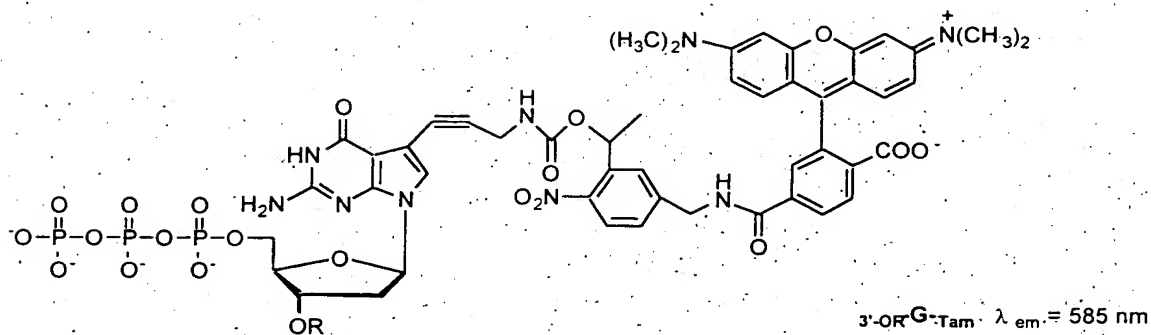
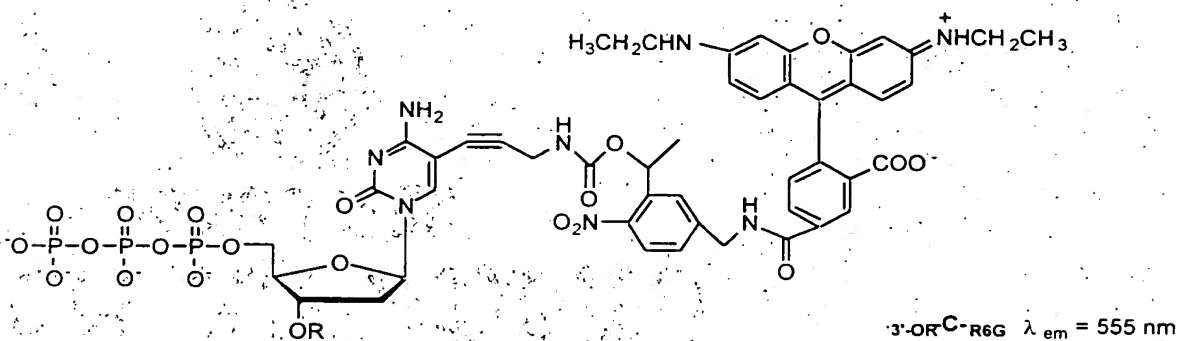
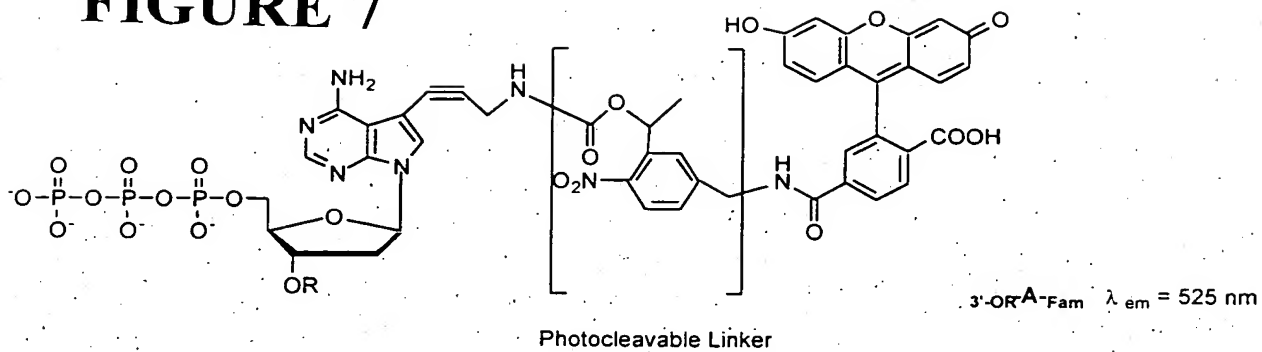
FIGURE 6B





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FIGURE 7



R = H,  $\text{CH}_2\text{OCH}_3$  (MOM) or  $\text{CH}_2\text{-CH=CH}_2$  (Allyl)

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## FIGURE 8

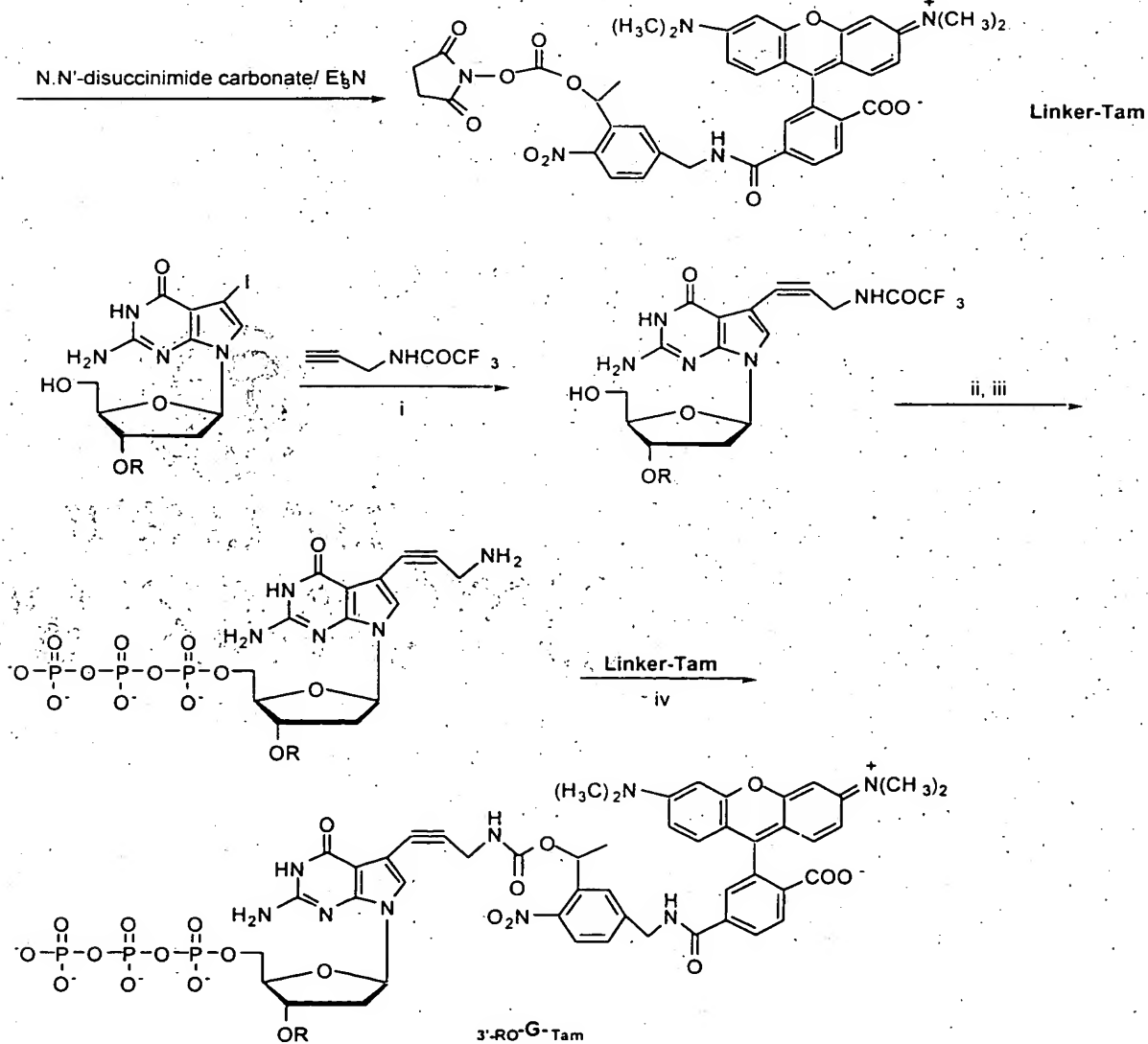
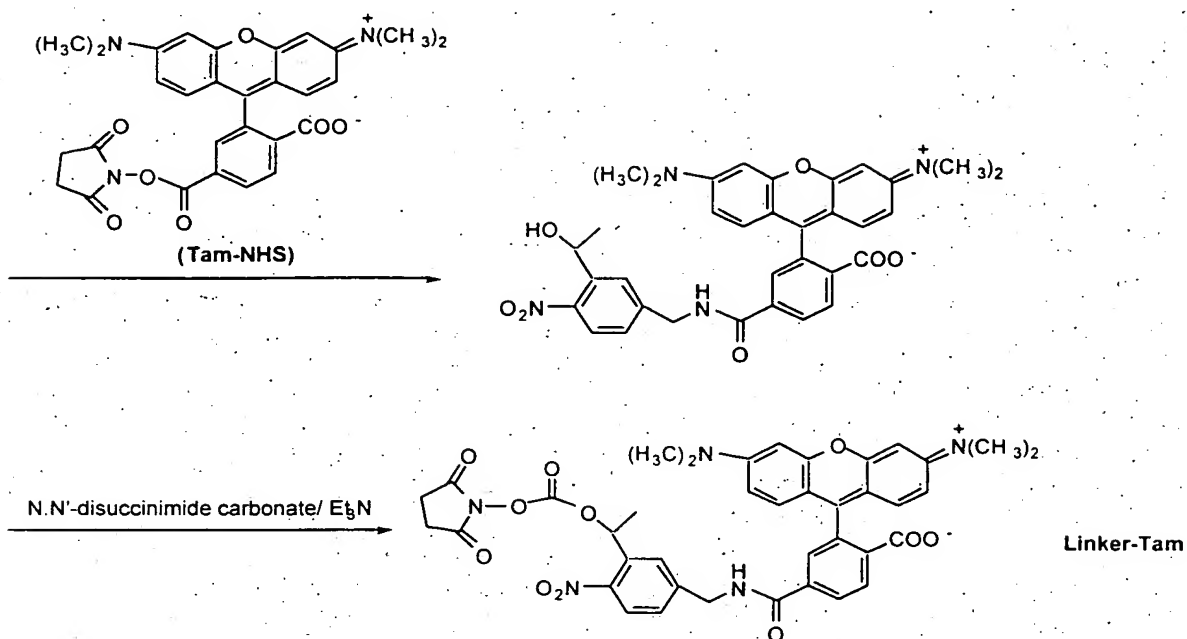
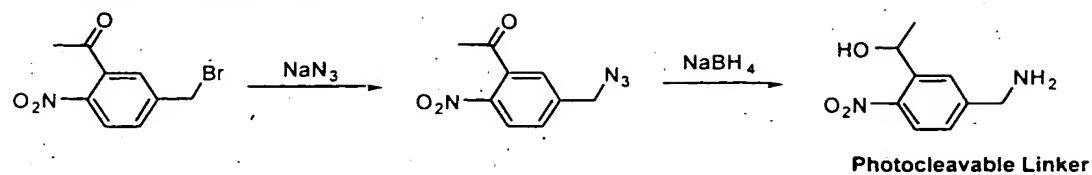
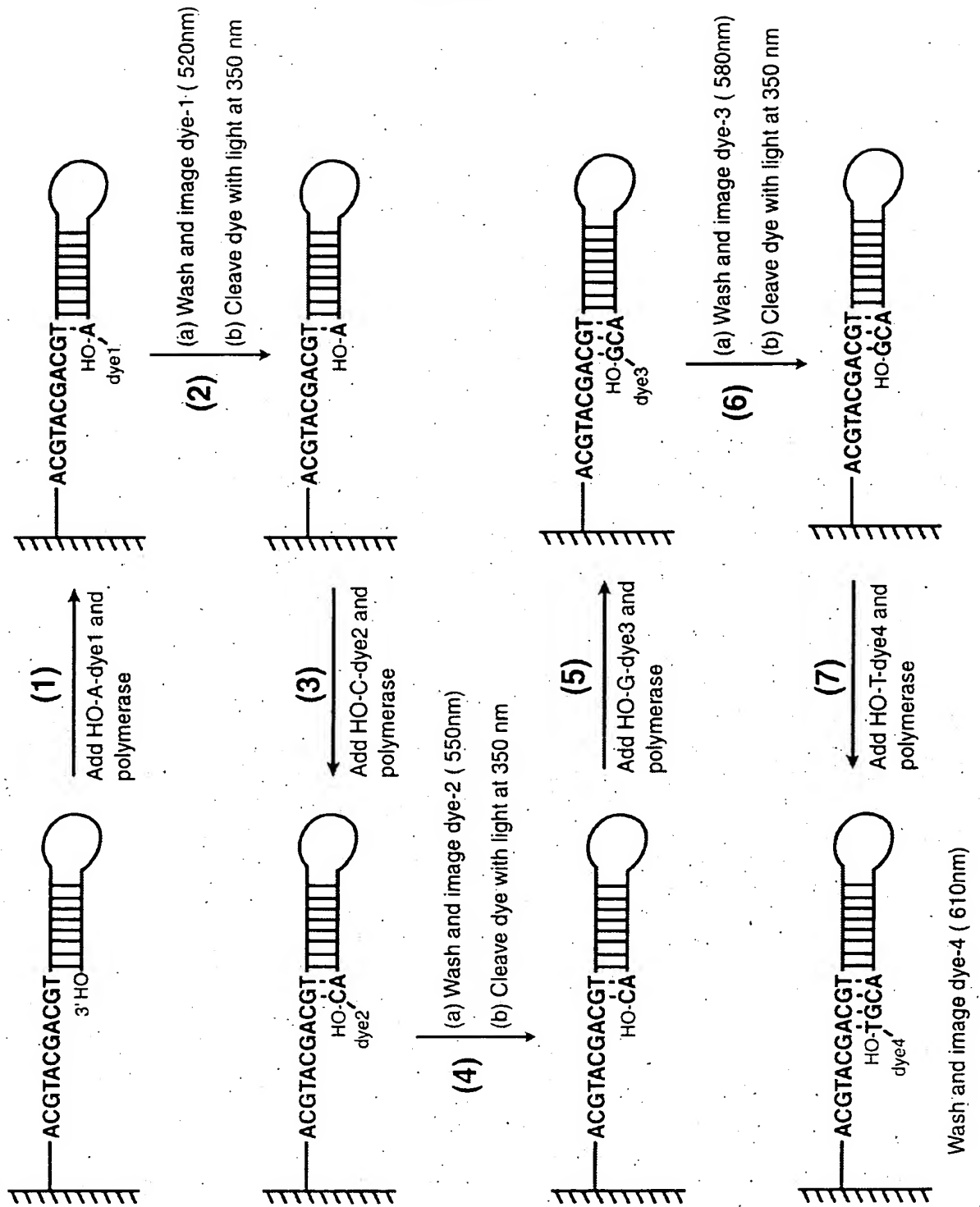


FIGURE 9



**FIGURE 10**

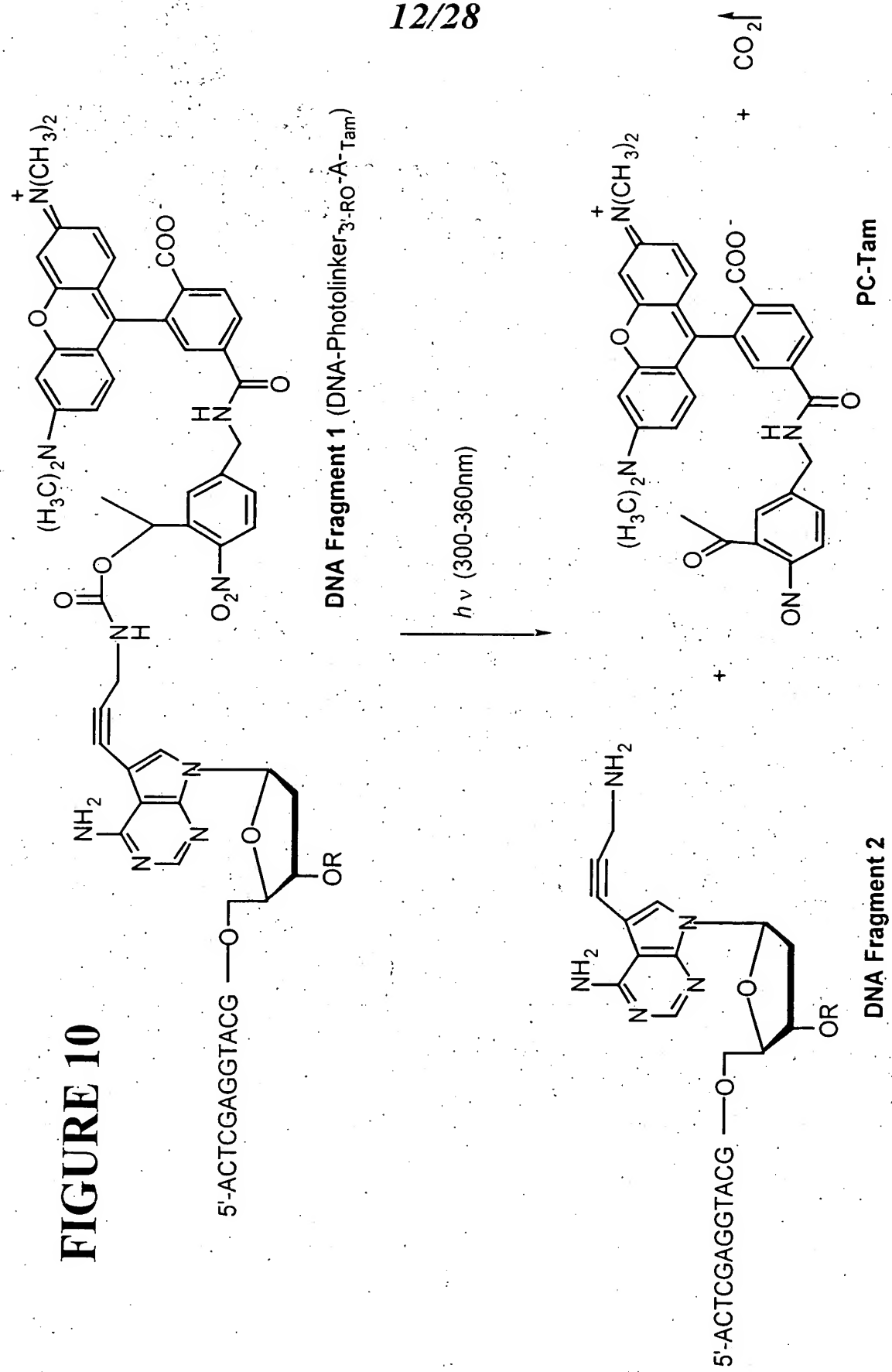
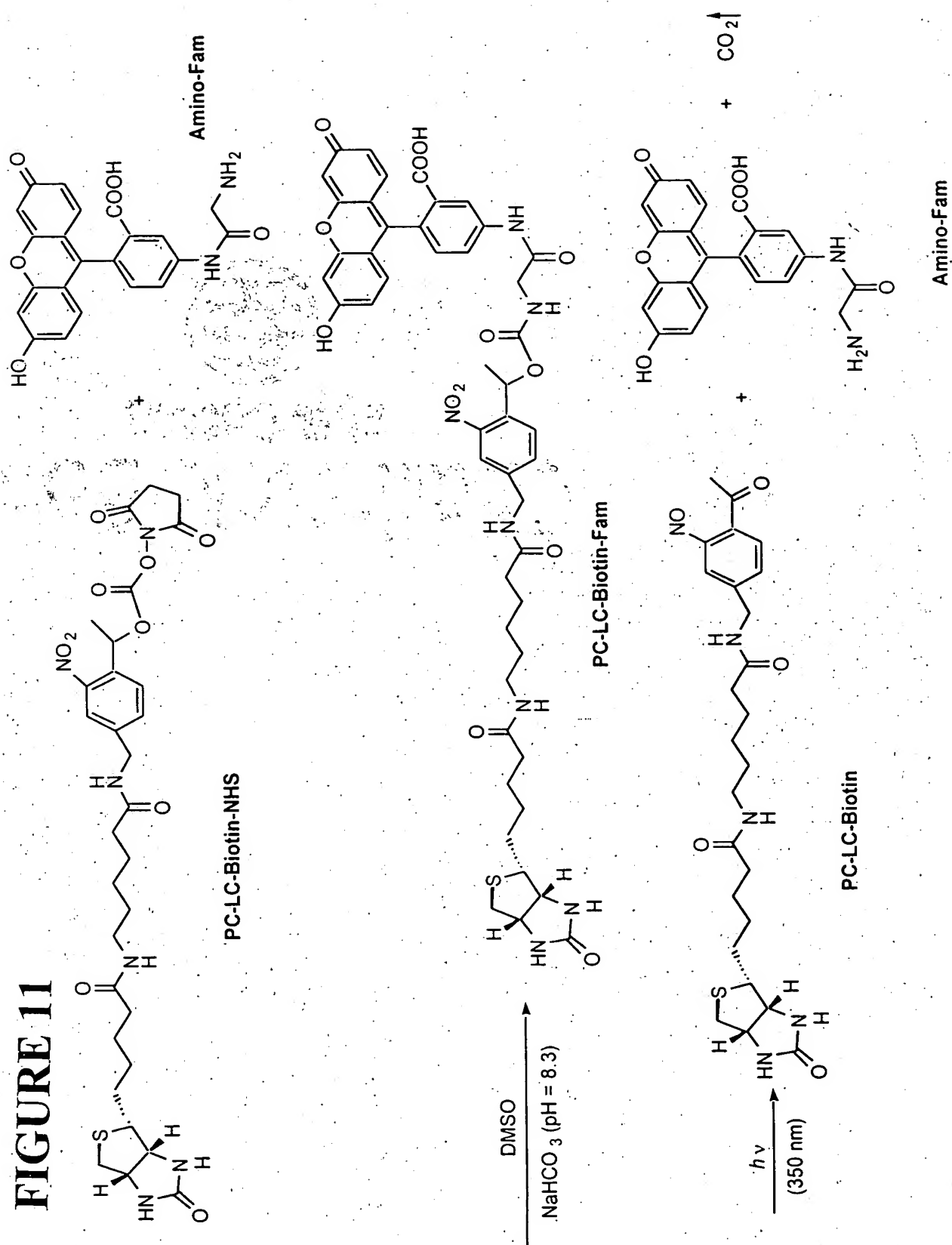


FIGURE 11



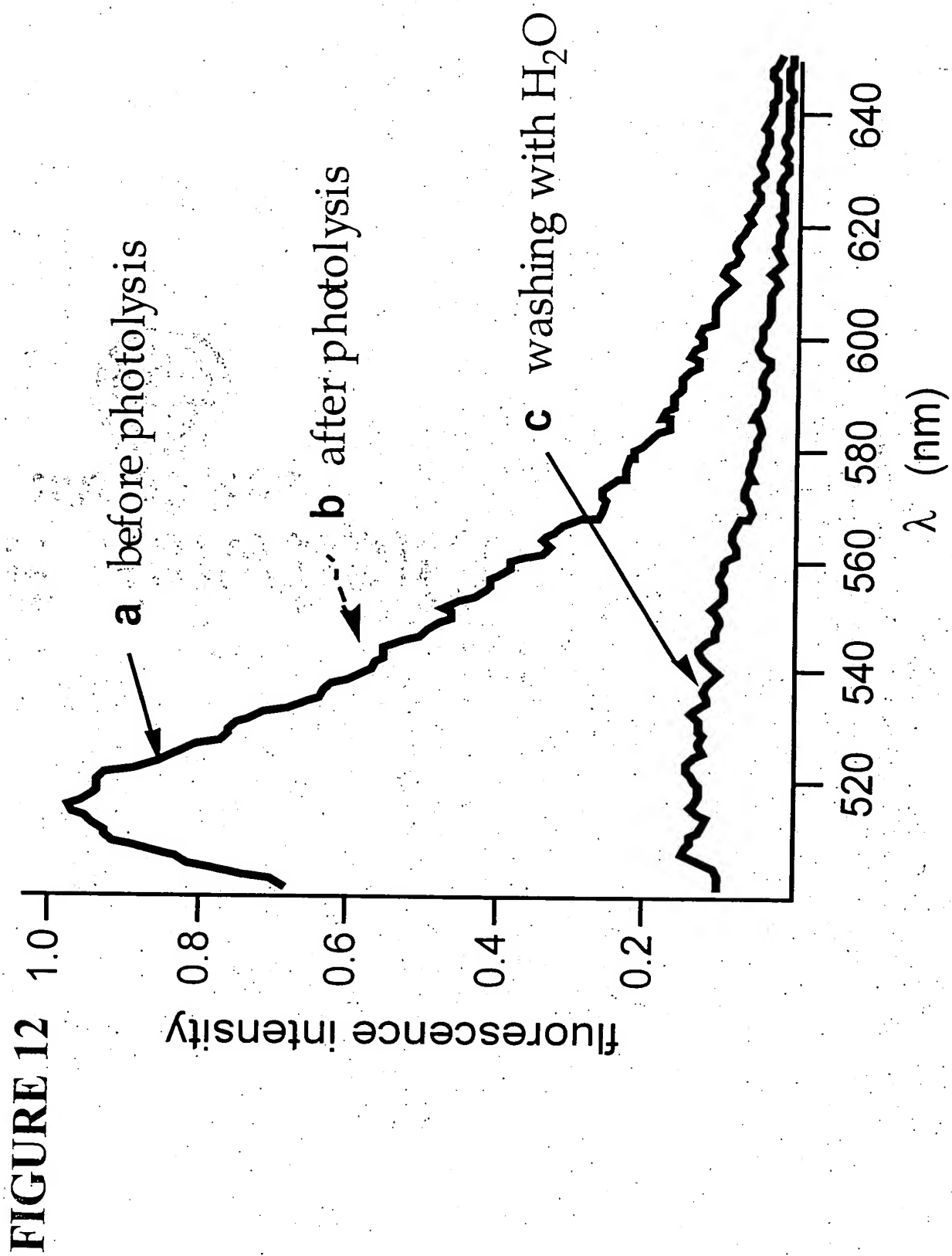
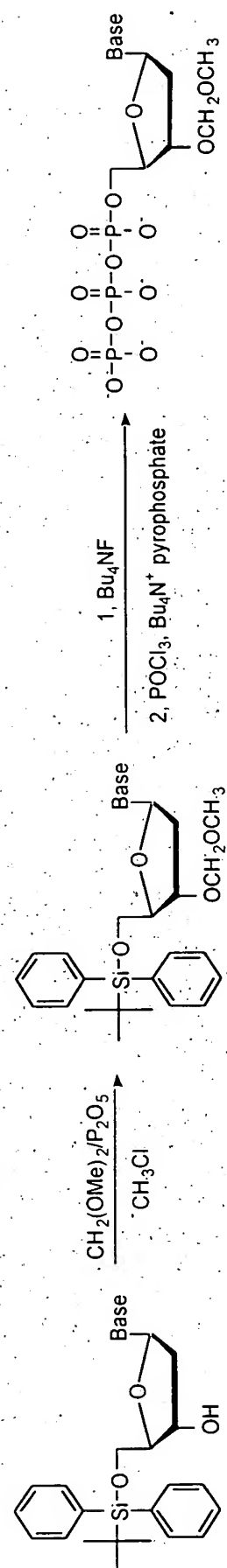


FIGURE 13A



(A)

FIGURE 13B

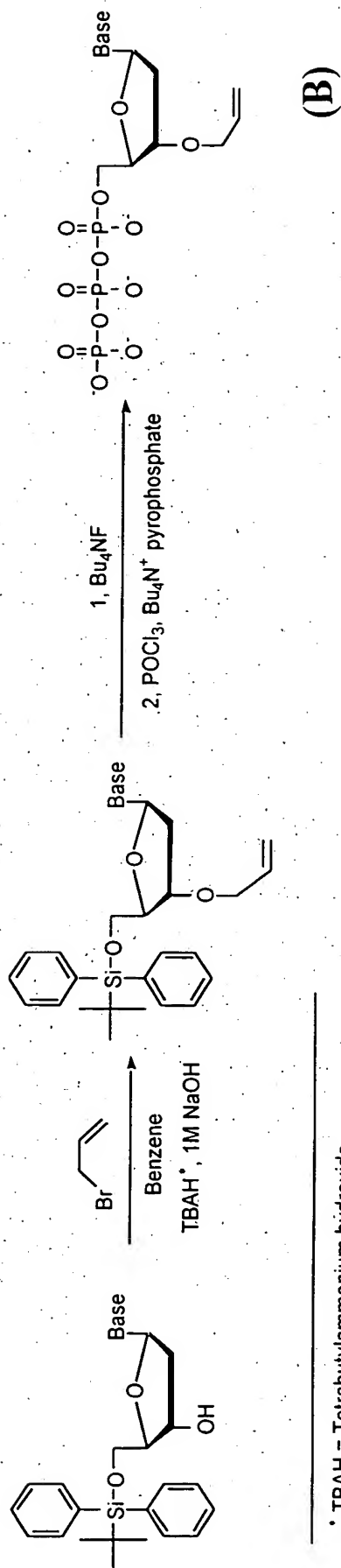
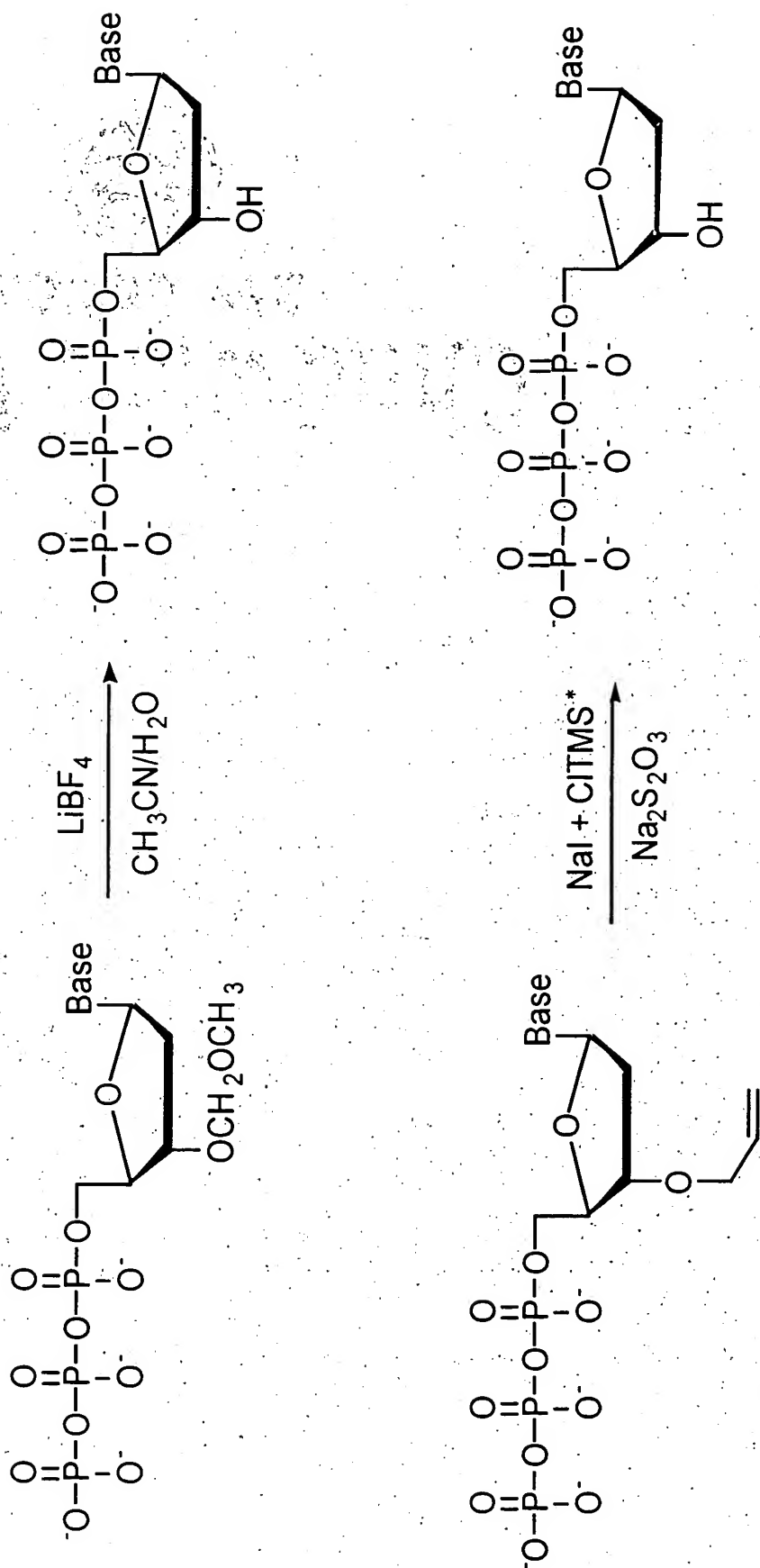




FIGURE 14

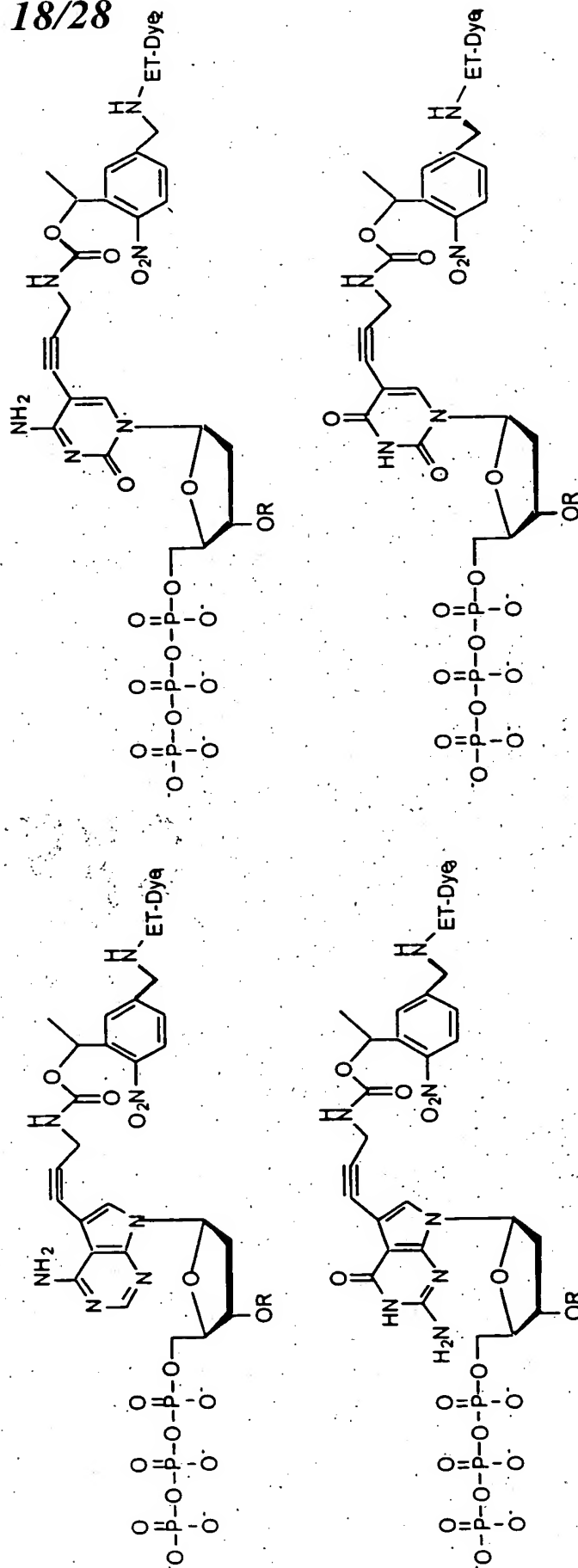



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\*CITMS = chlorotrimethylsilane

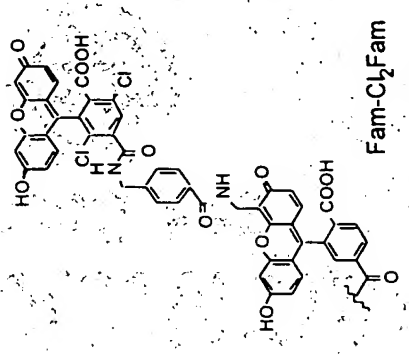
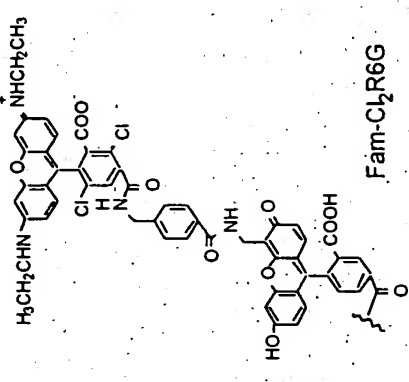
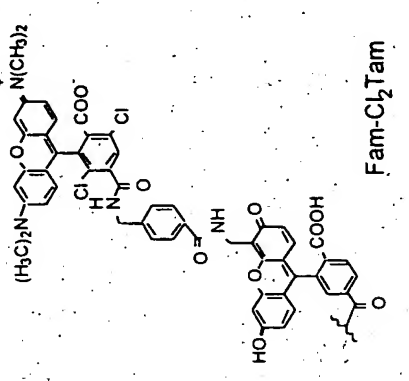
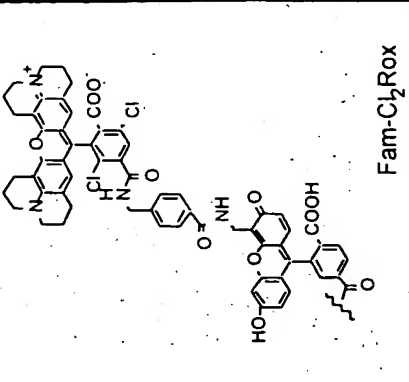
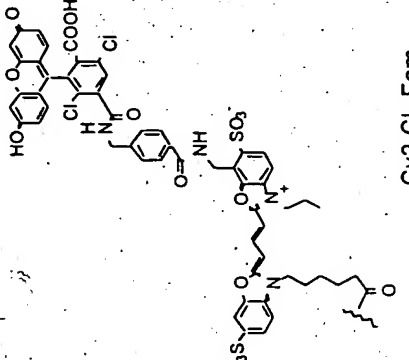
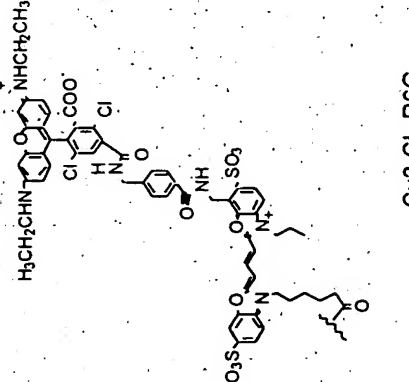
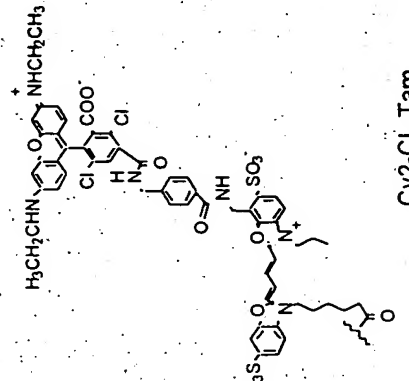
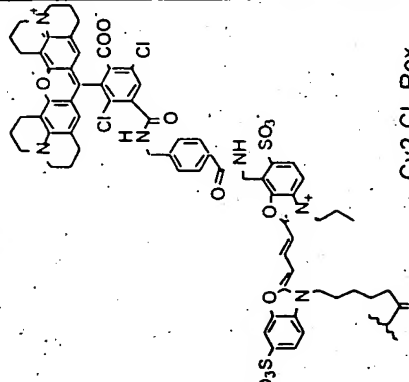
**FIGURE 15A**

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R = H, CH<sub>2</sub>OCH<sub>3</sub> (MOM) or CH<sub>2</sub>-CH=CH<sub>2</sub> (Allyl)

FIGURE 15B

ET Dye <sub>1</sub> $\lambda_{em} = 530 \text{ nm}$	ET Dye <sub>2</sub> $\lambda_{em} = 560 \text{ nm}$	ET Dye <sub>3</sub> $\lambda_{em} = 590 \text{ nm}$	ET Dye <sub>4</sub> $\lambda_{em} = 620 \text{ nm}$
 <p>Fam-Cl<sub>2</sub>Fam</p>	 <p>Fam-Cl<sub>2</sub>R6G</p>	 <p>Fam-Cl<sub>2</sub>Tam</p>	 <p>Fam-Cl<sub>2</sub>Rox</p>
 <p>Cy2-Cl<sub>2</sub>Fam</p>	 <p>Cy2-Cl<sub>2</sub>R6G</p>	 <p>Cy2-Cl<sub>2</sub>Tam</p>	 <p>Cy2-Cl<sub>2</sub>Rox</p>

## FIGURE 16

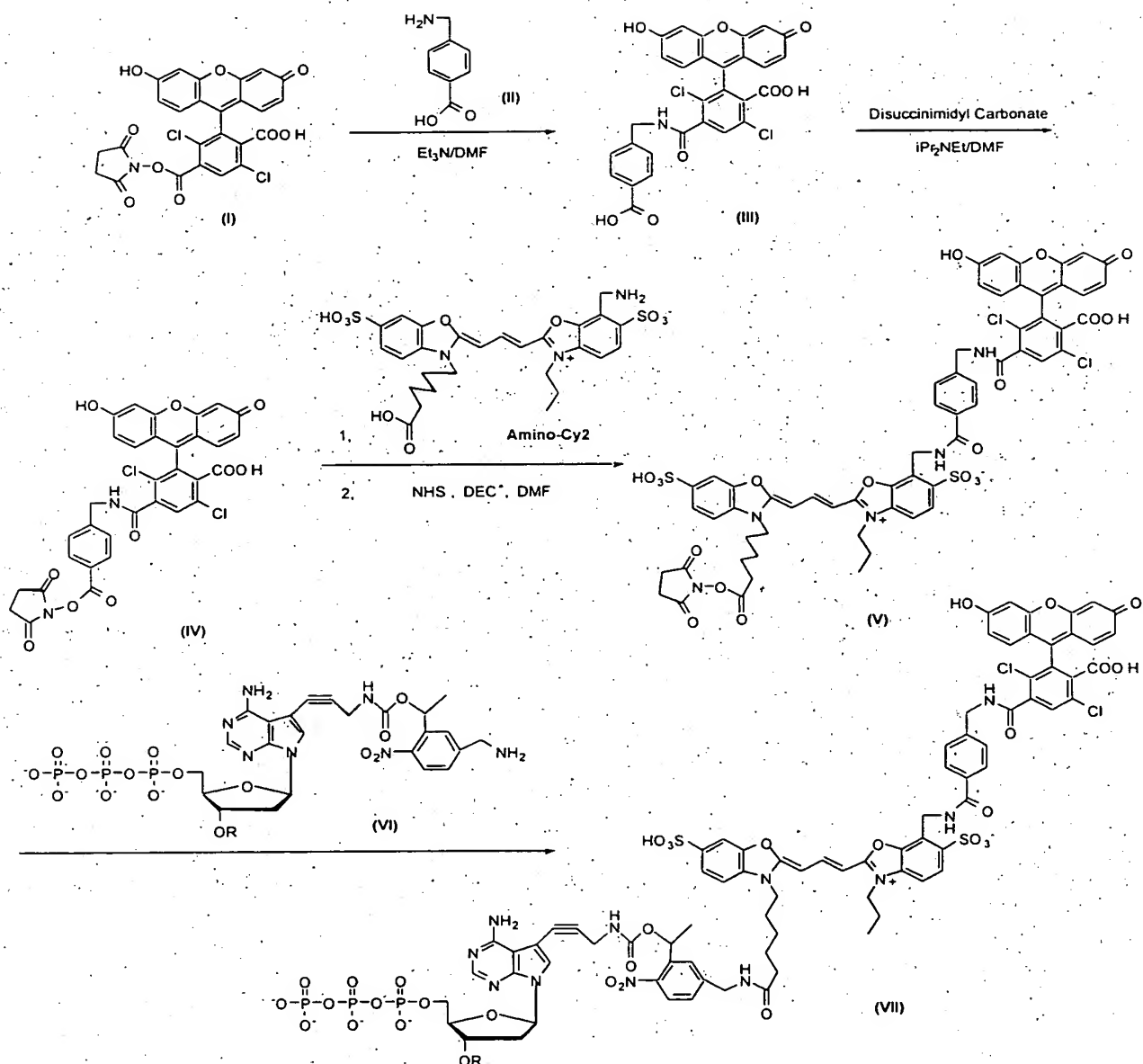


FIGURE 17

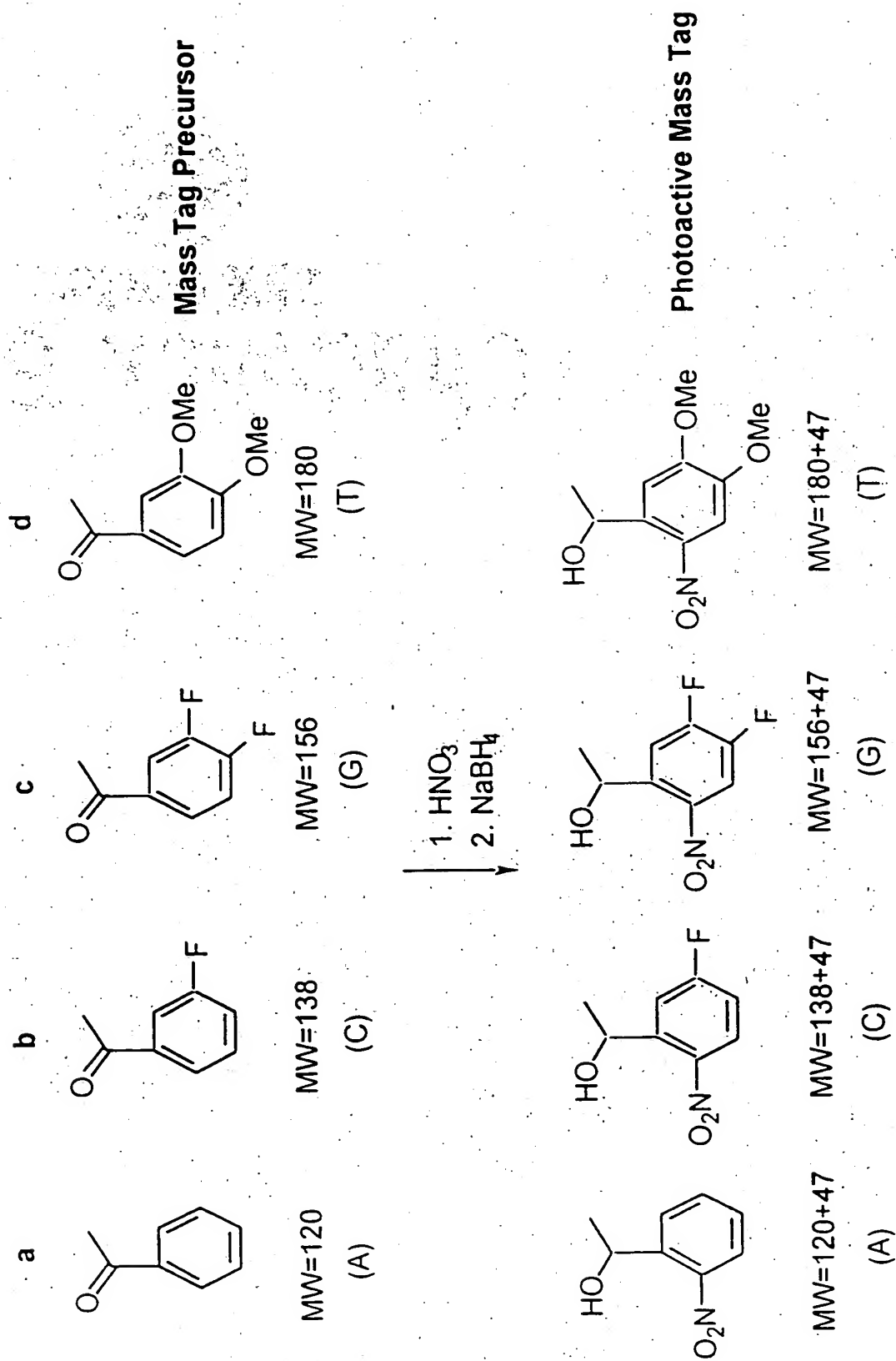
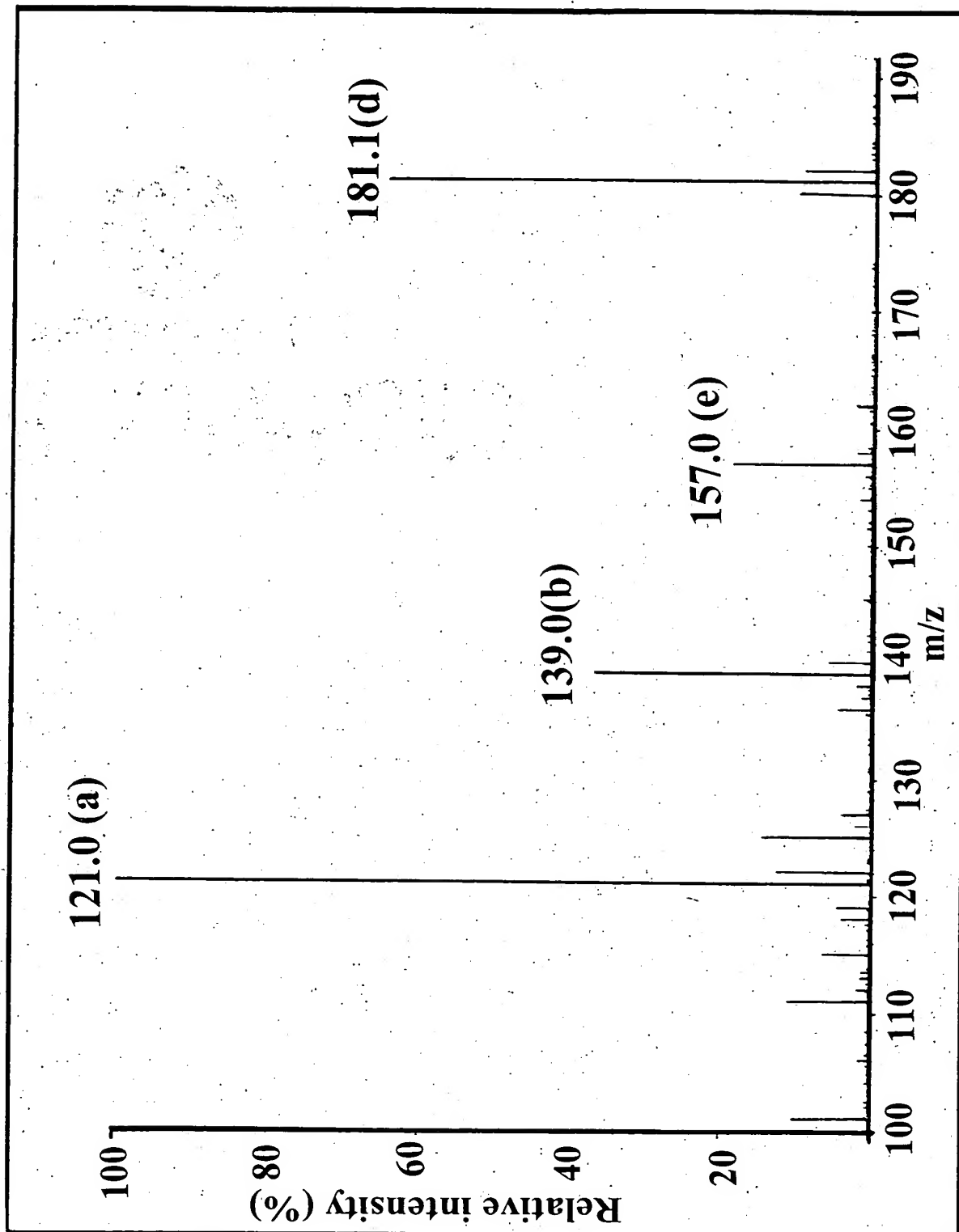
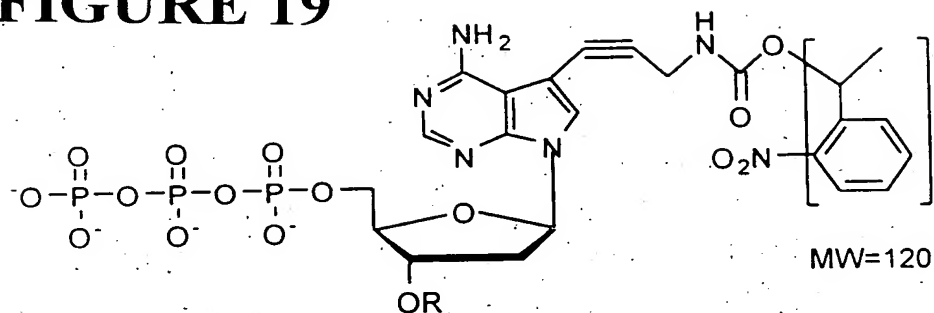
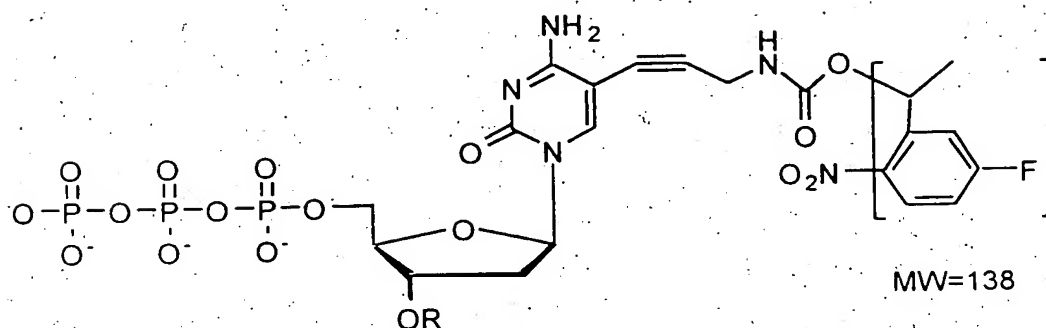
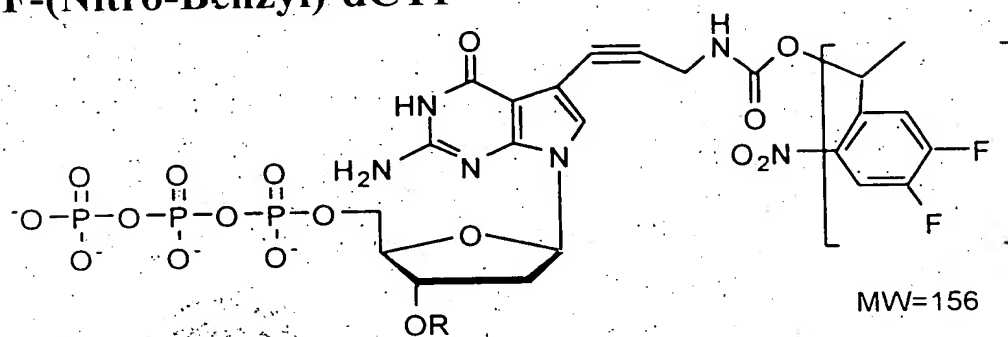
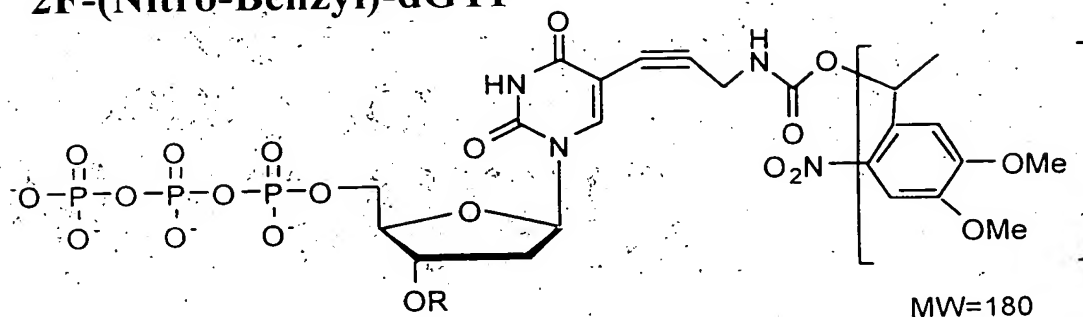


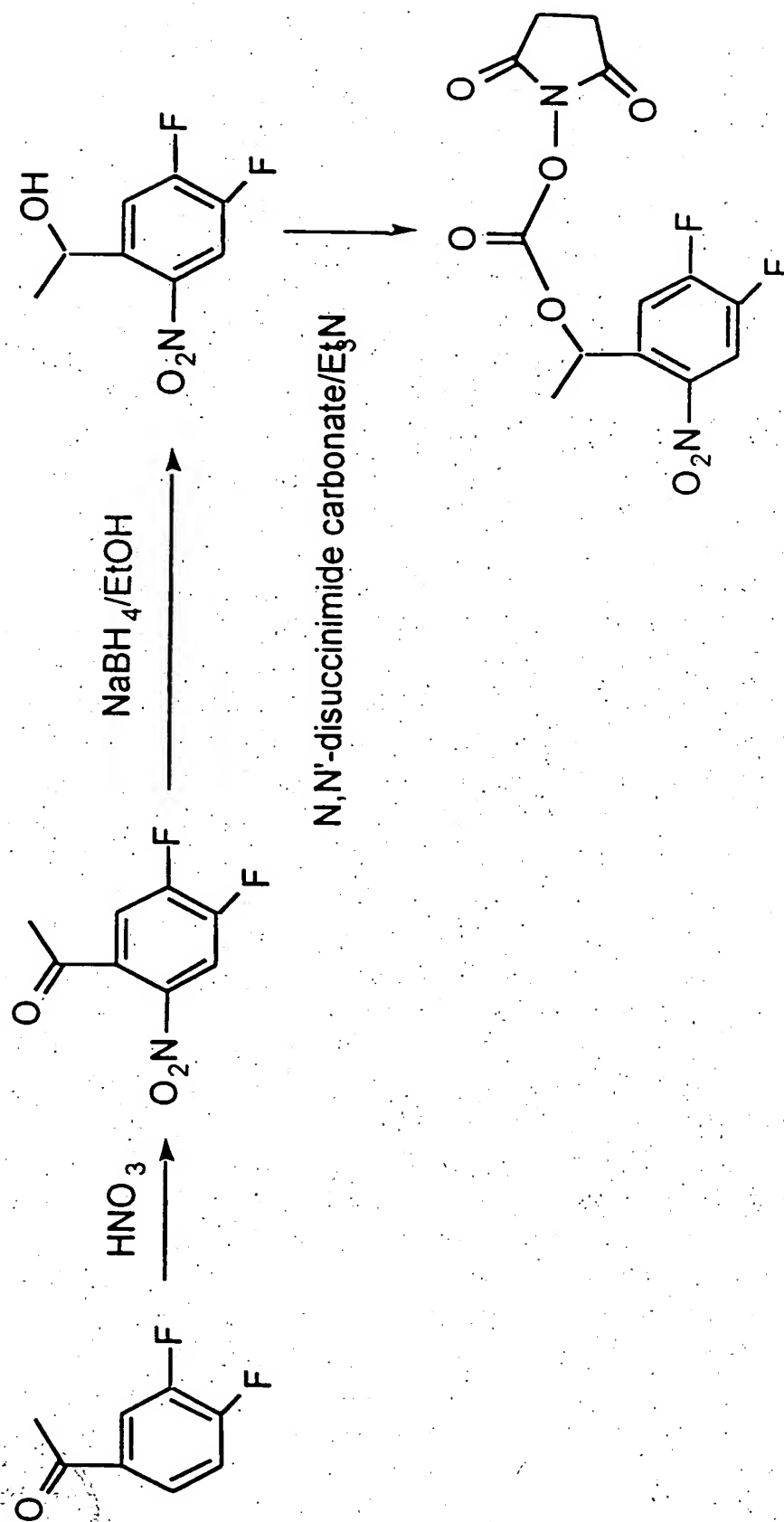
FIGURE 18



**FIGURE 19****(Nitro-Benzyl)-dATP****F-(Nitro-Benzyl)-dCTP****2F-(Nitro-Benzyl)-dGTP****2(MeO)-(Nitro-Benzyl)-dTTP**

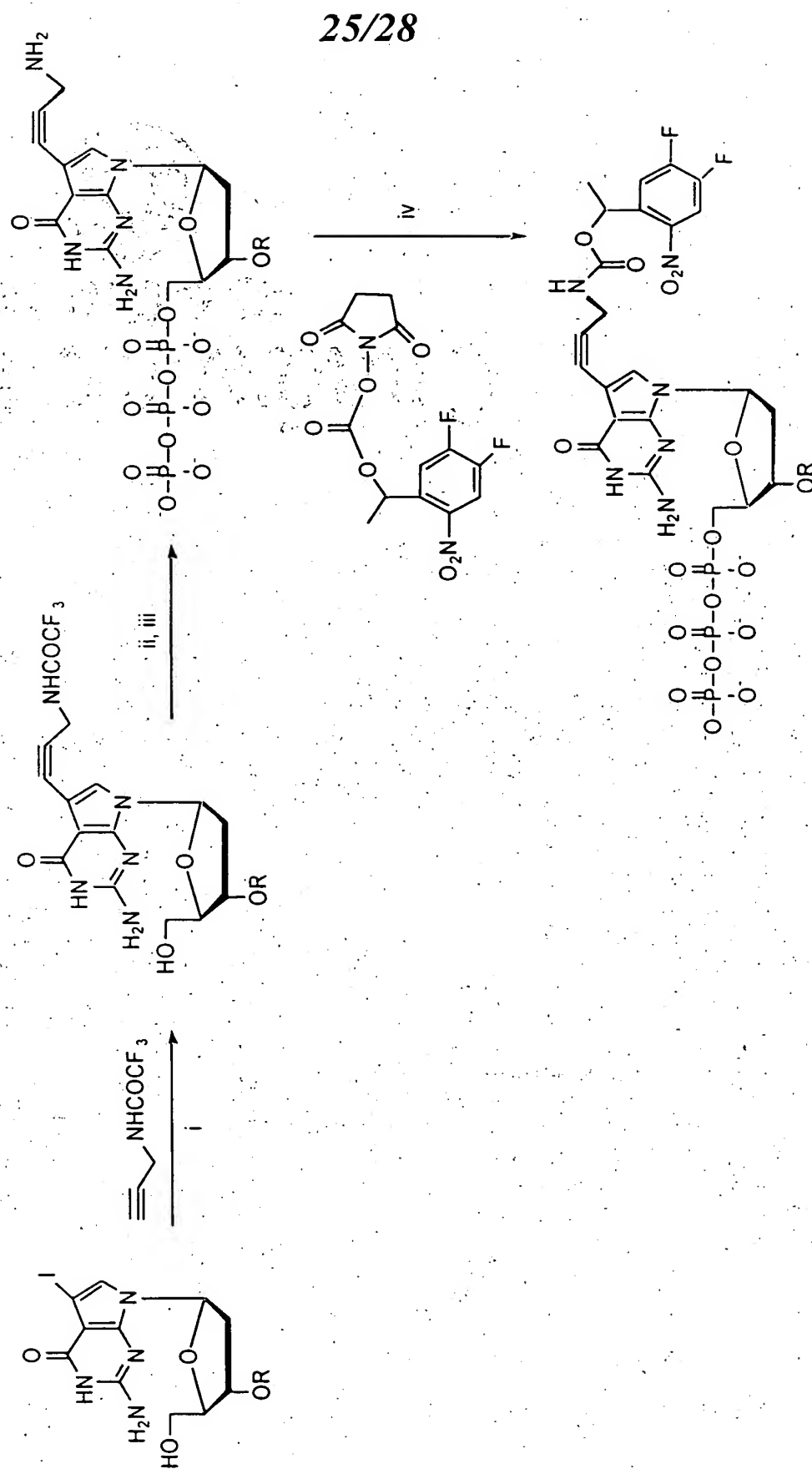
R = H, MOM or Allyl

FIGURE 20

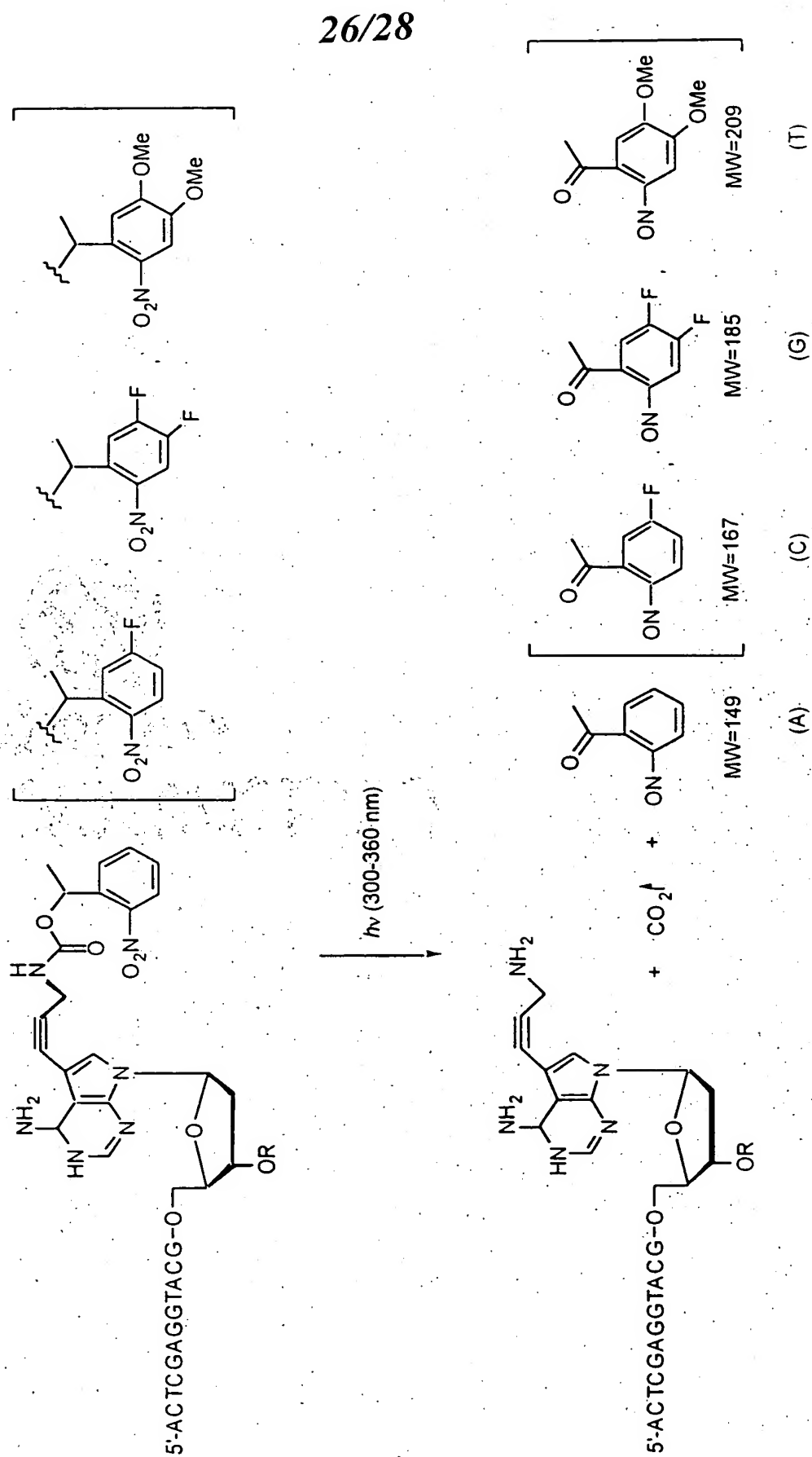




**FIGURE 21**



**FIGURE 22**



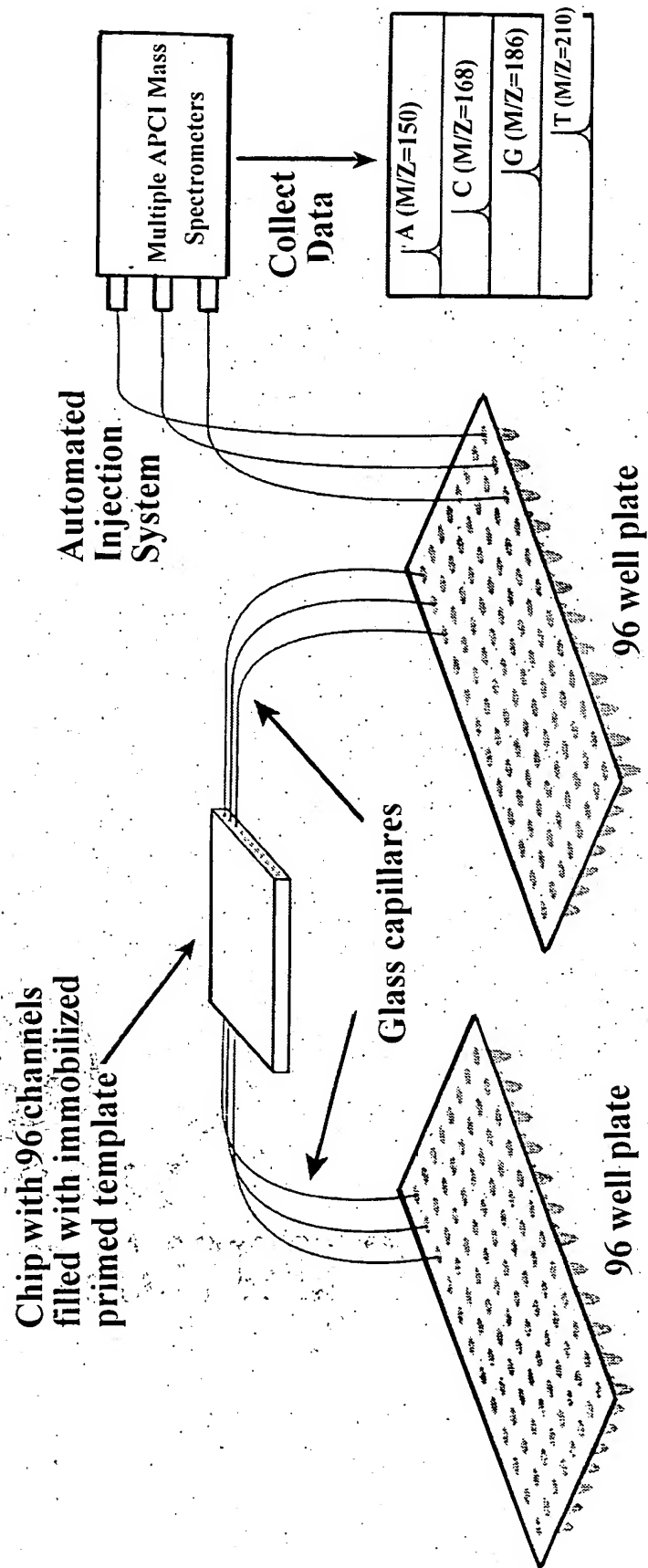
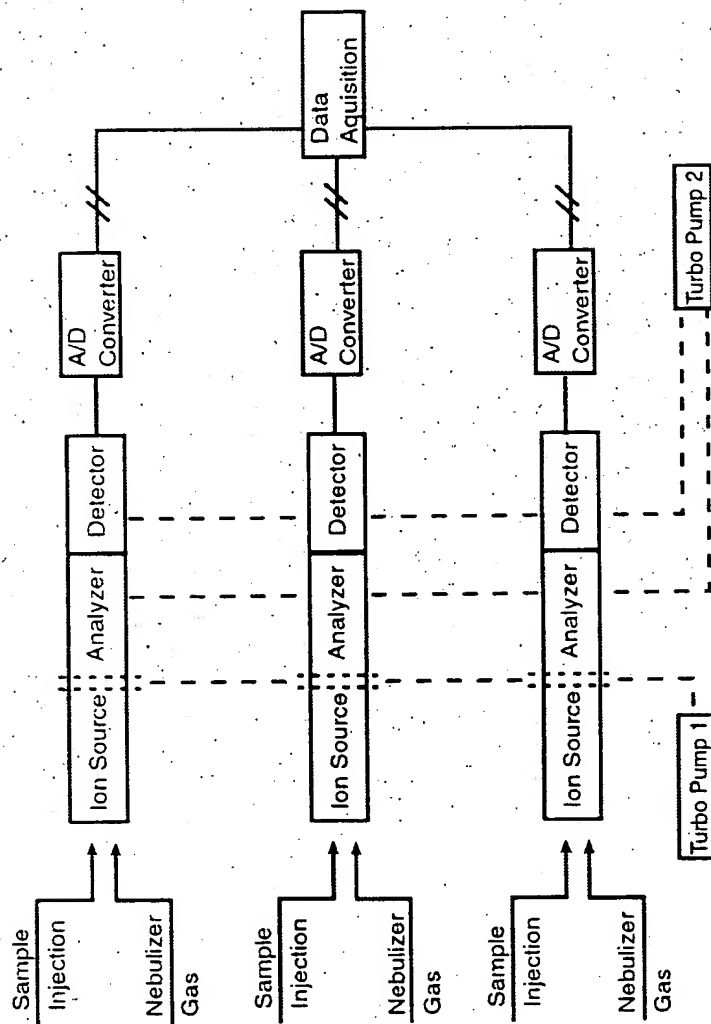
**FIGURE 23**

FIGURE 24



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